AMENDMENTS TO THE SPECIFICATION

IN THE ABSTRACT OF THE DISCLOSURE:

Replace the Abstract of the Disclosure currently of record with the attached new Abstract of the Disclosure.

--A non-volatile passive matrix memory device including an electrically polarizable dielectric memory material exhibiting hysteresis, first and second sets of addressing electrodes constitute word lines and bit lines of the memory device. The word lines are divided into segments with each segments sharing and being defined by adjoining bit lines. Means are provided for connecting each bit line of a segment with a sensing mean, thus enabling simultaneous connections of all memory cells of a word line segment for readout via the bit lines of the segment. Each sensing means senses the charge flow in a bit line in order to determine a stored logical value.--

IN THE SPECIFICATION

Page 1, first paragraph, please amend as follows:

The present invention concerns a non-volatile passive matrix memory device comprising an electrically polarizable dielectric memory material exhibiting hysteresis, particularly a ferroelectric material, wherein said memory material is provided sandwiched in a layer between a first set and second set of respective parallel addressing electrodes, wherein the electrodes of the first set constitute word lines of the memory device and are provided in substantially orthogonal relationship to the electrodes of the second set, the latter constituting bit lines of the memory device, wherein a memory cell with a capacitor-like structure is defined in the memory material at the crossings between word lines and bit lines, wherein the memory cells of the memory device constitute the elements of a passive matrix, wherein each memory cell can be selectively addressed for a write/read operation via a word line and bit line, wherein a write operation to a memory cell takes place by establishing a desired polarization state in the cell by means of a voltage being applied to the cell via the respective word line and bit line defining the cell, wherein said applied voltage either establishes a determined polarization state in the memory cell or is able to switch between the polarization states thereof, and wherein a read operation takes place by applying a switching voltage V_s larger ~~smaller~~ than the ~~switching or polarization~~ coercive voltage ~~V_s~~ V_c to the memory cell and detecting at least one electrical parameter of an output current on the bit lines.

Page 1, Before the second paragraph, please add the following new paragraph:

The invention further concerns a method for readout of a memory device of this kind.

Page 7, the fourth paragraph, please amend as follows:

Before giving a detailed description of preferred embodiments, the general background of the present invention shall be discussed in order to give a better understanding of how a passive matrix memory, or even a single memory cell in such a memory works. In this connection reference is made to fig. 1, which shows a typical so-called "hysteresis loop" of a ferroelectric material, whereas the polarization P of the ferroelectric material is plotted with regard to a potential difference V ~~versus the electric field E~~. The value of the polarization will travel around the loop in the direction indicated. A ferroelectric material with a hysteresis loop as shown in fig. 1 will change its net polarization direction ("switching") upon application of ~~an electric field E~~ a voltage V_s that exceeds a so-called coercive ~~electric field E_e~~ voltage V_c. As the ~~electric field E~~ voltage V_c exceeds the coercive ~~electric~~ field ~~E_e~~ V_c, the polarization P changes abruptly to a large positive value $+P_r$ (assuming starting at negative polarization at zero ~~electric field~~ potential). This positive polarization $+P_r$ remains until a ~~large~~ corresponding negative ~~electric field~~ voltage $-V_s$ exceeding ~~a~~ the negative coercive ~~electric field E_e~~ voltage $-V_c$ changes the polarization again back to negative polarization. In this

way, memory devices provided with capacitors comprising ferroelectric material will exhibit a memory effect in the absence of an applied external electric field, making it possible to store non-volatile data by applying a potential difference across the ferroelectric material, which evokes a polarization response. The direction (and magnitude) thereof may thus be set and left in a desired state. Likewise, the polarization status can be determined. Storing and determining data will be described in more detail below.